

Figure 6 in the drawing has been amended as shown in the attached Replacement Sheet of Drawing, and the corresponding description of Figure 6 at page 23, starting at line 25 is amended to match the correct description given elsewhere in the specification.

5           The Examiner first rejects claims 1- 7 , 9 – 17, and 19 – 34 under 35 U.S.C. 103(a) as being unpatentable over Dogan et al (US 6,018,317) in view of Gardner et al (US 5,299,148). The Examiner then gives a number of reasons for the rejection. The applicant does not specifically argue a number of the rejections, listed below, because many of the elements and processes described in the applicant's application are known in the art and are used by the  
10 applicant. Rather, the applicant addresses rejections pertaining to the independent claims and why the amended independent claims are now allowable. The applicant believes that the amended, narrower independent claims 1 and 25 are allowable and the remaining dependent claims are allowable based on their dependency from an allowable independent claim.

15           The applicant does not discuss a number of specific claim rejections made by the Examiner since they address prior art elements that are used in conjunction with the applicant's invention to create a complete working system. The specific rejections address: "a priori knowledge", the original broader breadth of independent claims 1 and 25, iterative processing, time domain processing, orthogonalizing signals, weighting circuits and weighting antenna  
20 signals, summing antenna signals, direction finding, correlation interferometer direction finding, covariance matrices, eigenspace, Hermitian matrix decomposition, beam forming weights and steering vectors.

25           Applicant's independent claims 1 and 25 have been narrowed to focus on the applicant's unique combination of time domain and frequency domain processing that are in original claims 2 and 3 and other claims, is shown in applicant's Figure 4 and is described in the specification. Parts of claim 2 and the time domain and frequency domain processing in original claim 3 have been merged into amended claims 1 and 25.